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ABSTRACT

Focusing on problems in the teaching/learning process related to the classroom atmosphere, this book demonstrates problems related to gender bias in the classroom, discusses the implications of these and other problems, and offers suggestions for improving the teaching/learning environment. The first section describes the importance of classroom atmosphere in the teaching/learning process, highlighting research showing the effect of gender bias on the relative achievement of females and males and discussing the concept of the "chilly climate" faced by women in college classrooms. The next section focuses on creating a welcoming and inclusive classroom environment, providing tips for faculty related to building rapport with students, promoting student interaction, and encouraging student participation. Next, elements of a feminist, egalitarian pedagogy are described and strategies are provided for dealing with unequal power relationships in three areas: the relationship between students and course content, student-faculty power relationships, and student-to-student power relationships. A review is then presented of collaborative and cooperative learning and strategies are described for encouraging student interdependence, interaction, and individual accountability. Finally, the relationship between language and classroom atmosphere is discussed and strategies are presented to help faculty make the classroom more hospitable, including paying attention to classroom interaction patterns, intervening in communication patterns, and responding to males and females in similar ways. Contains 56 references. (HAA)

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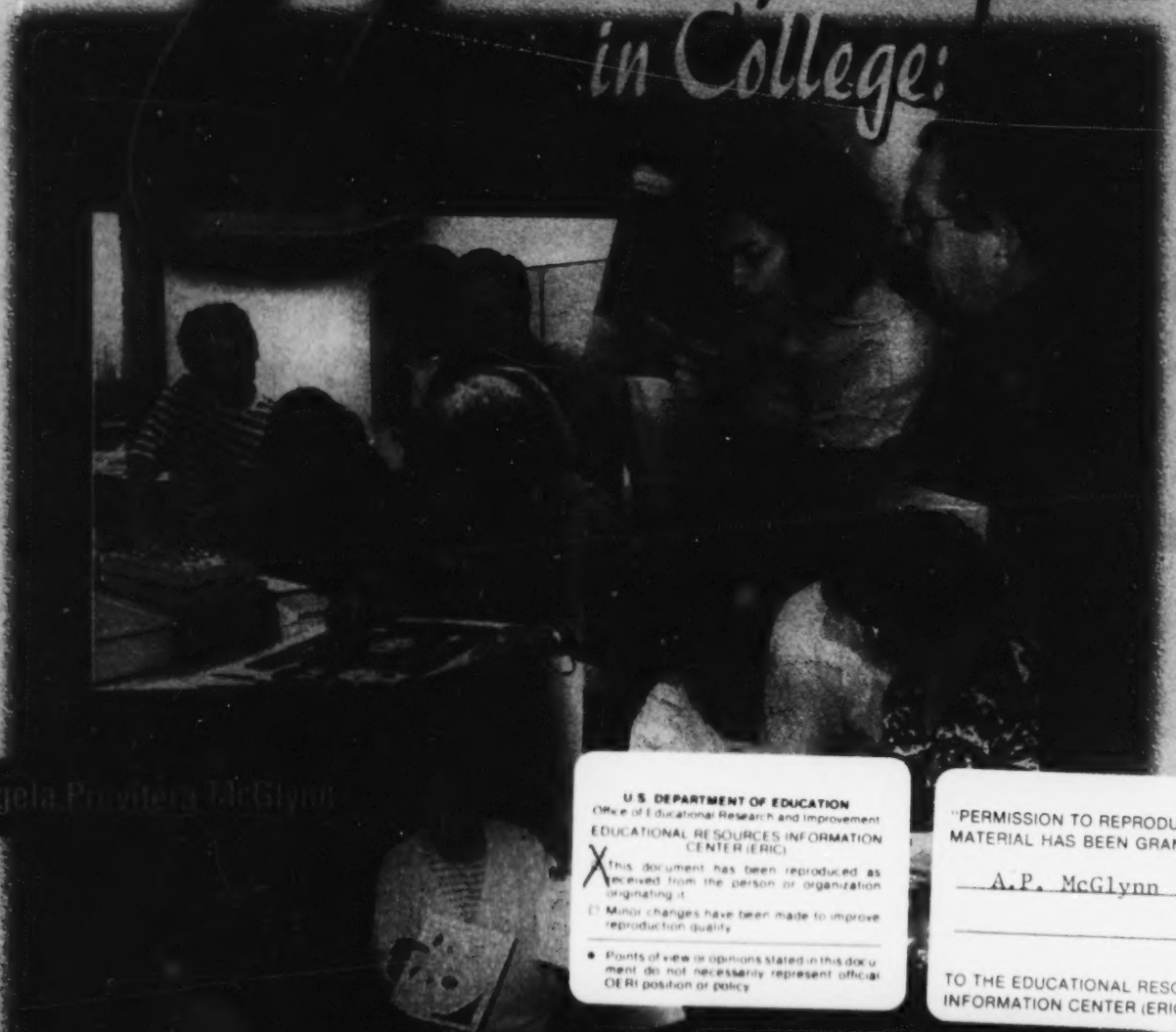

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## Improving the Teaching/Learning Environment

JC 960 531



BEST COPY AVAILABLE

# *CLASSROOM ATMOSPHERE IN COLLEGE IMPROVING THE TEACHING/LEARNING ENVIRONMENT*

**Angela Provitera McGlynn**

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# *DEDICATION*

This book is dedicated to the memory of Jimmy Colavita.

James Colavita died on May 21, 1996. Weeks before that date, Dean Andy Conrad attached a note to the request for the jacket cover of this book which read,

> *"some image to show a warm "fuzzy" atmosphere, but not frivolous."*

I had provided the text for the cover and Andy asked Lynn Holl-Madara to create a cover that would reflect a warm classroom environment with academic integrity.

Lynn designed this cover prior to Jimmy's sudden and untimely death - how appropriate to have included a photo of him with a student since he exemplified, by his life, his teaching, and the atmosphere he created around himself, the very essence of what this book is about. Jimmy will be greatly missed.

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## CLASSROOM ATMOSPHERE

*Most of us have been in classrooms a good share of our lives, both as students and teachers. Yet despite extensive opportunities to observe teaching and learning, most of us embark upon our teaching careers knowing very little about teaching and learning. It occurred to me as I walked home in the dark the other night that I look at the heavens every night, or at least am aware of - and sometimes in awe of - stars, moon, and changing patterns in the sky. Yet I know almost nothing about astronomy. I am a naive observer of the heavens, just as most of us are naive observers of teaching.*

*Most of us are naive observers of teaching and naive practitioners of the art and science of teaching as well. We don't know enough about the intricate processes of teaching and learning to be able to learn from our constant exposure to the classroom. We see the big things. We can spot a dozing student, one lost in some other world, or an eager hand waver...But we are not trained to observe the more subtle measures of learning. The college classroom is not the place for relaxed naivite for either students or faculty. The experience would be far richer and more enjoyable if both teachers and students were more curious and more sophisticated about the effect of teaching on learning. But even more important, as educators, we have an obligation to understand the teaching/learning process well enough to improve it. (Cross, 1990, p.9)*

A place to begin an analysis of the teaching/learning process is with classroom atmosphere. This book aims to demonstrate the problems related to classroom atmosphere, to discuss the implications and ramifications of those problems, and to offer some suggested solutions for enhancing the teaching/learning environment. Most faculty would probably agree that what happens in a classroom is dependent on a host of variables; some of these factors are inside the faculty member's control and some are not. First, students and faculty come to the college classroom with attitudes, learning styles, and behaviors learned earlier. These factors interact with the content of the course and the teaching style of the faculty member. All these elements influence the subjective experience of students. Some students may be encouraged to participate in the learning experience of the classroom while others may be discouraged or inhibited from doing so. This book will explore the factors within the instructor's control that may influence the teaching/learning process. Much of the research in this area points to the fact that the teacher-student relationship and the interactions between them greatly impact on the learning process, and even on students' self esteem, aspiration levels, and career choices.

For well over two decades, there has been a growing body of research documenting differential treatment of students in classes, ranging from grade school through graduate education. Although this information has been extensively discussed in feminist journals and women's conferences, the research has not yet become a part of the mainstream educational system.

> *While some faculty members believe that sexism and its impact on women are exaggerated, or things of the past, sexism clearly is ingrained in our speech and behavior. Knowing the subtle ways in which sexism manifests itself can help us eliminate sexist discrimination.* *(Sandler, Silverberg, & Hall, 1996, p. 4)*

Grade school classroom studies, many of them using videotapes of teacher behavior, have clearly demonstrated that teachers generally pay more attention to boys than girls in numerous ways. Teachers ask boys harder questions, allow them more time to answer questions, ask probing follow up questions, and give them more praise and more criticism than girls (Sadker & Sadker, 1994). In addition, other research shows that grade school teachers tend to give boys specific instructions on how to complete a project or task. In contrast, teachers more often show girls how to do a project or do it for them (Sandler & Hoffman, 1992).

Hall and Sandler's (1982) review of research for all educational levels shows six major ways in which teachers communicate sex-role expectations to students:

1. Teachers call on male students more often than on female students.
2. Teachers coach males to work for a more complete answer more often than they coach females.
3. Teachers wait longer for males to answer questions than they wait for females before going on to another student.
4. Teachers are more likely to ask female students questions that require factual answers.
5. Teachers respond more extensively to male students' comments than to female students' comments.
6. Teachers communicate sex-role stereotypes by their use of sexist language.

Myra and David Sadker, university professors who have studied teacher-student interactions, have shown that many teachers are not conscious of gender inequities in the classroom. Teachers who believed they were being "fair" were often shocked to see themselves on videotape behaving in ways that were completely unconscious to them in terms of differential treatment. This has led us to understand that what happens in the classroom may be overt and obvious or it may be much more subtle and elusive. The challenges we face in our classes may, therefore, involve some soul searching and consciousness raising.

According to a study done by American Association of University Women, one result of differential treatment of grade school girls is that by the time they reach adolescence, girls have lost more of their self-esteem than have boys. Further, the same study showed that girls had lower career aspirations than boys even when their potential and their successes were comparable.

Sandler and Hoffman (1992) suggest that the types of grade school classroom practices described above, combined with sexism in society at large, contribute to a classroom atmosphere in which women's contributions and women's words seem less

valuable to us. In a classic study done by Goldberg (1968), female college students gave higher grades to essays they thought were written by males. Identical essays allegedly written by women were judged as inferior. This study, along with a myriad of others, shows us that women incorporate the same societal messages of female inferiority as do men. Study after study in all fields and disciplines document similar findings. The most recent studies of the 1990's show mixed results which may mean that the effect is lessening or it may mean that college student subjects are becoming more savvy about what responses are considered appropriate.

Studies have shown that gender is the most salient characteristic that we notice when first encountering someone. It seems to be even more salient than race, ethnicity, or age. We all develop gender "schemas" very early in life. We categorize people as males or females and then gender schemas shape our perceptions, thoughts, expectations, and behaviors of ourselves and of others. This happens both consciously and unconsciously, and it happens in all aspects of our lives. The classroom is no exception. Faculty and students come to the college classroom with a host of gender-related expectations for themselves and for others. Most faculty members would probably like to believe that they do not hold stereotypes, expectations, prejudices, and biases of any type. However, none of us can escape the socialization process that has shaped our understandings of our social worlds. At this point, there is extensive empirical and anecdotal evidence that many faculty members, both men *and* women treat women and men differently in the classroom. These behaviors may be overt, as for example, by the use of language, statements, or questions that are in some way gender biased, or they may be more subtle, such as nonverbal cues, gestures, and eye contact. In either case, the behaviors may be conscious or completely outside the instructor's awareness.

The Sadkers' research documented a lack of awareness on the part of faculty to their patterns of behavior in the classroom. An experimental group of twenty-three instructors who had participated in a gender awareness workshop, and twenty-three instructors who had not participated, viewed a videotape on classroom behavior. The first time the experimental subjects viewed the videotape, they believed that the instructor was treating all students similarly. In their second viewing which followed the gender awareness workshop, subjects realized that the instructor in the videotape had asked three times as many questions of the male students and gave four times as much praise to male students as to female students. Additionally, when the experimental subjects were compared to the control subjects who had not attended the gender awareness workshop, there were significant differences in their classroom behavior. Instructors who had participated in the gender awareness workshop conducted classes that were more interactive where men and women students participated equally, and where there was more student participation in general. Moreover, these instructors gave more precise feedback on students' comments and questions and demonstrated less gender bias in their teaching (Sadker & Sadker, 1990).

A study was conducted at Wheaton College in Norton, Massachusetts by C.G. Krupnick two years after the institution admitted men for the first time. This study showed that although only ten percent of the students in class were men, these male students did twenty five percent of the speaking in class. This pattern occurred even though the classes were predominantly female and the majority of faculty members were also female. Analysis of videotapes of classroom sessions at this same institution further showed that men put their hands up to answer questions faster than women did and that women were more likely to expand the previous speaker's ideas rather than to challenge them (Fiske, 1990).

**The "chilly climate" concept and research**

Hall and Sandler (1982) wrote the first comprehensive report on differential treatment of men and women in the college classroom. The term, "chilly climate," was coined to describe classroom atmosphere for many women in colleges and universities. What they found from their research were a myriad of gender inequities, some of them small and at first glance, trivial, and some that were quite profound. Even the small inequities, when taken together, seemed to create an environment for women that was not hospitable at the least, and hostile at its worst. The term, "microinequities," has been coined by Mary Rowe of MIT to describe the many small and subtle ways people are treated differently in the classroom because of their gender, race, ethnicity, or age.

Although women have made great advances in recent years in terms of admittance to the academic world and their accomplishments there, the way they are treated within the classroom may diminish their levels of achievement. This may be true at some institutions more than at others and in some disciplines more than in others. In terms of disciplines, for example, our schools, and our society at large, make it hard for girls and women to pursue math, science, and engineering. And, although some studies show that women are beginning to catch up in some parts of the school experience, there is still what has been called the professional "gender gap" in these fields. At the professional level, the math/science gender gap is closing very slowly. One researcher estimated that if present trends continue, it would take more than two thousand years before women earn as many math doctorates as men do each year (Stipp, 1992).

Dr. Charlene Morrow, a professor at Mount Holyoke College, calls math a "career filter" for technical fields and most professions requiring advanced studies. If women shy away from mathematics and related fields in college, they will not be able to pursue many academic majors and careers. Grade and high school teachers, and faculty at the college level, need to be conscious of gender stereotypes concerning math aptitude. Additionally, teachers need to be aware of what attitudes students, both males and females, bring to class about math aptitude and gender. In math and science disciplines, it is very clear that teachers need to take a proactive stance in encouraging female students.

In *all* disciplines, faculty need to stay conscious of the fact that students sitting side by side each other in the same class may be having very different experiences. The

following list of examples of differential treatment of students in the classroom is taken from research reports and studies done on numerous college campuses (Hall & Sandler, 1982; Sandler & Hoffman, 1992; and Sandler, Silverberg, and Hall, 1996). These examples of comments and behaviors (some verbal, some nonverbal; some conscious, some nonconscious) by faculty may disparage women and their abilities, and they may challenge women students' commitment to their education. Many of these examples also apply to other groups of students who may be treated differently in class: students of color, students who speak with a foreign or regional accent, students with disabilities, students who are not middle class, students who are not heterosexual, and older students.

- using language that is sexist or exclusionary or phrases that disparage women or disparage women's intellectual ability
- interrupting women in the middle of their answers in class
- comments that disparage women's seriousness and/or academic commitment, as for example, my woman friend in law school whose professor asked her in the first class why she was there. He followed with the quip, "Was Bloomingdale's closed?"
- use of sexist humor in class
- making eye contact more often with male students than with female students, or more often with Anglo students than with students of color
- offering more encouragement to men who participate in class
- nodding and gesturing more often in response to men students' questions and comments than to women's
- using a tone of voice to communicate interest in what only the men have to say in class
- using a tone of voice that demonstrates impatience or is patronizing to women
- assuming a posture of attentiveness when only men speak in class
- checking one's clock or frowning when women speak
- favoring men in choosing assistants
- giving men detailed instructions on how to complete a project while either doing the project for women students or giving them less complete instructions, allowing them to fail
- giving men more praise and credit
- behaviors that communicate lower expectations for women, as for example grouping women in ways which indicate they have lower status or are less capable, making comments that imply women are less competent than men, calling males "men" and females "girls" or "gals."
- reflecting the influence of internalized stereotypes, such as using examples that reflect gender and/or racial/ethnic stereotypes
- excluding women and other so-called "outsider" groups from class participation
- giving women and other nonwhite, male students less attention and intellectual encouragement
- making disparaging remarks about women's issues, or making light of issues such as sexual harassment, domestic violence and sexual assault

- making disparaging remarks about women's scholarship or specific works and accomplishments
- using humor in a hostile manner

In 1996, Sandler, Silverberg, and Hall summarized the research from the 1980's and 1990's in a book called, The Chilly Classroom Climate: A Guide to Improve the Education of Women. While the Hall and Sandler work, published in 1982, focused specifically on the teacher behaviors that contribute to a chilly climate, this more recent work goes beyond teacher behavior and examines how the classroom atmosphere is impacted by classroom structure, power dynamics, teaching styles, the curriculum, and the relationships among the students.

In The Chilly Classroom Climate, the authors make several assumptions that seem relevant for our understanding of classroom atmosphere. Sandler, Silverberg, and Hall assume that learning is facilitated when students are active contributors and teachers are responsive to students. Students may be active learners in a number of ways. They may participate by practicing active listening skills, by taking notes, by working in pairs or groups, or by asking questions and making comments.

They further believe that teacher-student interactions affect not only the level of student participation, but also students' learning, self-esteem, student satisfaction, and even motivation to succeed and career choices. In their research, they cite evidence that both male and female faculty members treat students differently based on gender and that they often do so completely unknowingly. They suggest that the subtle ways faculty treat women differently also affects other groups, as for example, students of color, students who speak with a foreign or regional accent, lesbian, gay, or bisexual students, older students, persons with disabilities, and working class students. They call these groups "outsider" groups. These other factors, in addition to gender, factors such as race, ethnicity, age, sexual orientation, level of ability, and social class are also critical variables affecting teacher-student interactions which, in turn, affect students' classroom experience.

Sandler, Silverberg, and Hall (1996) believe that although *all* students would benefit from the recommendations for good teaching that follow from their research, good teaching alone cannot eliminate the effects of bias and this is where faculty awareness becomes important. They caution their readers that their research necessarily involves generalizations about people and generalizations are always subject to exceptions. Not all women or all men behave in such and such a way. The generalizations simply tell us that women and men are more likely to behave in a particular way. The generalizations help us to understand how gender, not solely, and certainly not in isolation, tends to affect teacher-student interaction and what follows from the atmosphere created in the classroom.

A number of studies that followed the 1982 report on the chilly climate were conducted at colleges and universities throughout the country. Some climate studies found very little difference in faculty behavior toward men and women and little difference in level

or quality of participation by their male and female students. Heller, Puff, and Mills (1985) suggested that the chilly climate might be more manifest in certain institutions than in others or in certain programs within institutions.

Other research (Constantinople, et al., 1988; Cornelius et al., 1990; and Heller et al., 1985) found that other factors, such as class size, discipline, and time of semester were actually more influential on student participation than the gender of instructor or student. These studies concluded that teacher behavior does not greatly influence student participation and therefore targeting faculty behavior for change was inappropriate. Crawford and MacLeod (1990) found that regardless of the size of the institution, class size was the factor most important to student participation. In fact, class size seemed to influence students' perceptions as to whether a course encouraged participation and whether they as individuals could participate and were free to assert their ideas.

Sandler, Silverberg, and Hall's 1996 summary and analysis of all the previous research makes several points to address the issues raised above. First, the researchers who found differences in student participation based on gender in class but did not believe those differences were related to faculty differential treatment of men and women may be right. Sandler et al. agree that students may actually bring differences to the classroom. Obviously, female students have lived a life of experience that has already shaped their way of being in the world and in the classroom. Sandler et al. further agree that what perpetuates gender differences in classroom participation may not be overt discrimination of any kind on the part of the instructor. Rather, it may be the instructor's lack of attention and awareness to gender that exacerbates women's negative classroom experience where it exists. Faculty may need to take a much more proactive stance to remedy the host of factors that may contribute to the lesser participation of women. In other words, even in cases where faculty are not the *cause* of women's inhibitions in the classroom, they need to be part of the solution.

A Guide to Improve the Education of Women offers many recommendations to help faculty to increase student involvement in class. The Sandler et al. suggestions will help instructors develop a variety of teaching strategies to reach a diverse student population. The recommendations that I will be offering from the Sandler et al. research, from other sources, and from our own Mercer students are not about accommodating women and other "outsider" groups. The strategies presented later in this book are about enhancing the learning environment for women, for students of color, for older students...for *all* students. Crawford and MacLeod (1990) conclude that the lower participation of female students, and others who are reticent to speak in class, is best managed by teachers who are aware of the research and who have developed a variety of teaching methodologies to create a "student-friendly" classroom. The strategies described in the following sections of this book are based on the examination of classroom atmosphere research. Hopefully, these strategies will help us to make our teaching more dynamic and more inclusive.

**The results of a Mercer County Community College "climate" survey**

On the backs of my student evaluations the Spring, 1996 term, I asked an open ended question about classroom atmosphere. I deliberately phrased the question so as to get positive suggestions rather than complaints. The question I posed was, "What suggestions do you have to improve classroom atmosphere so that the learning environment would be more conducive for you to learn?" Despite the fact that the question says nothing about differential treatment of students, several students' responses suggested that some students are experiencing some of their classes differently based on gender and other variables. For example, two female students reported that although they raise their hands to answer questions, their instructor only establishes eye contact with the males in the class who cluster on one side of the room. These students both suggested that faculty pay attention to seating arrangements since in their observations, there is sometimes gender segregation and often segregation by race. (In the next section, pp.11 and 12, # 3 and 4, I will discuss the seating arrangements issue.)

The other suggestions from students were remarkably similar. Of the students who responded to this question in my survey, very many of them suggested that instructors should be more responsive and respectful of students' questions. Many students said rapport with the teacher was a crucial factor in whether they felt comfortable in class or not. Specific suggestions offered in terms of classroom strategies included the recommendation for the use of more circles in class, and for more student-student interaction as for example, more group work done in class.

## CREATING A WELCOMING, INCLUSIVE CLASSROOM ENVIRONMENT

> *The emotional climate of the classroom is directly related to the attainment of academic excellence, however defined. Students' feelings about what they experience in class - whether inclusion or exclusion, mastery or inadequacy, support or hostility - cannot be divorced from what and how well they learn.*
> (Wilkinson & Ansell, 1992, p.4)

By now the evidence is irrefutable that student success has an affective dimension, that is, it is tied to how students *feel* in class and at an institution. Retention studies conducted over the last two decades in higher education suggest that one of the most crucial factors in promoting students' completion of their studies is creating an atmosphere of community. Do students feel that they *belong* at a particular institution? How can the faculty at an institution promote that sense of belongingness in their classes?

The "climate" research reported in the last section points to the same conclusion. Do some of our students, for whatever reasons, feel excluded in our classes? The modified focus groups I conducted for several years beginning in the late 1980's with Mercer students and the more recent Spring, 1996 survey I conducted concerning classroom atmosphere generate the same kinds of comments and recommendations as does the more formal research.

Faculty-student interaction seems to play a big role in students' comfort level in class. Many educators believe that student success is more likely if students feel safe in class. Is the classroom atmosphere conducive to students feeling that they are respected, supported, and encouraged by their instructors to learn? Do they have a sense of belonging to a community? Do they feel that their faculty and the institution care about them and their futures?

The ideal classroom atmosphere is one where students feel connected to the instructor and also connected to their classmates. There are many ways instructors can connect with students personally. There are also activities that can promote student-student connections. The general classroom atmosphere is dependent on the quality of these relationships.

### Establishing a welcoming environment by building rapport and connecting with students: tips for faculty

1. When you walk into class the first day, and every day, greet the class either as a whole or greet students individually. This can be as simple as smiling and saying, "Hi!" People are reinforced when they are greeted as if the other person is pleased to see them. It is a simple task yet it goes very far in establishing warmth in the classroom.

2. In your first class, tell the students by what name you prefer to be called and ask them their preference concerning their name. Students are often non-committal and sometimes it takes gentle prodding to find out if they have a nick name or by what name they are addressed by their friends. Once you find out their preference, write it down in your roll book so you can remember it. If you need to make marks in your book to aid you in pronunciation of their names, do so and ask them to correct you if you mispronounce their names. Although many faculty are burdened by large classes, find ways (see *Teaching Tips, [*McGlynn,1992, p.5] for mnemonic devices) to learn students' names early in the semester. Mostly, this takes motivation. There is greater motivation when you realize the difference this may make in terms of student participation and learning. In most of the research on retention and climate, and from students' own reports, when instructors know their students' names, students feel more comfortable and more positive about the class.

3. In general, it works best to call all students by either first or last names. If given the choice, most students will select to be called by their first names and this creates an atmosphere that is less formal and more friendly. However, if you and the class are more comfortable with last names, if you call the men in the class by "Mr.," then call the women by "Ms." unless they request to be addressed differently.

4. Use your students' names in class in ways to boost their self esteem. You may quote a student's comment made earlier in the class if it is appropriate to a later point you are making. (Be sure to quote non-white, and female students' comments as frequently as white male students' comments since this is one of the clearest inadvertent differential treatment practices found in the chilly climate research.) Where appropriate, praise individuals for their questions, comments, answers to questions in class, test grades, papers they write and work they submit. At the end of a good class discussion or when an entire class does well on a test or project, praise the class as a whole. If a student does not do well on a test, paper, or project, speak to her privately and ask him if she knows what went wrong and how he might do better in the future. You can offer some guidance for improvement here in a non-judgmental way.

5. Since frequency of faculty-student contact inside and outside of class seems to promote student motivation, perseverance, and success, talk to students before and after class. In the very beginning of the semester, give students your office number, office hours, phone extension and voice mail instructions. Invite students to your office by telling them it is okay to drop by, by establishing conferences with them, and by asking them to pick up their work at your office.

6. Students report in study after study that they appreciate having instructors who are approachable. They say that instructors seem approachable when they respect their students as persons and as learners. Students value teachers who seem to care about them as people and who show an interest in their learning.

Students say they want their instructors to talk to them in language, and at a level, that is understandable to them. Students say it helps them feel relaxed in class when their instructors step out of "role" and share personal experiences with them. Of course, pedagogically, this works best when instructors can use personal experiences to demonstrate the course content. Students say they especially appreciate when their instructors have a sense of humor. In short, what all of their responses seem to indicate is that students feel that the classroom atmosphere is more relaxed when there is less formality and when instructors seem like real people to them, when they feel connected to their instructors, and when they feel their instructors care about them.

**Establishing a welcoming environment by promoting student-student interactions: tips for faculty**

1. The first day of class is an important one to set the tone for the semester. In addition to the faculty-student connection, it is important to do something that gets students to meet each other. First class activities in which students interact are critical in establishing a warm classroom atmosphere. Many of us need to let go of our need to make that first class full to brimming with our introductions to the content and mechanics of our courses. The research is quite clear that student perseverance and success are more dependent on the relationships they establish in class than on what we have to tell them about our course. For a complete description of first day class exercises, see *Teaching Tips*, (McGlynn, 1992, pp. 5-7). Whatever you choose to do, the important ingredient is to get students to meet at least a few other people in class in a non-threatening way. You may be able to work an exercise in that involves your course material.

2. Early in the semester, devise a way to get students to exchange phone numbers for absences and missed work and assignments. You might get students to look for another student from the same geographical area, zip code, or phone exchange. You might even ask students to pair up with someone in the same curriculum or who shares similar career aspirations. You can mention your expectations that students should be responsible for obtaining missed work or hand-outs. You can add that some form of a buddy system has worked out well at colleges and universities throughout the nation. Mention to your students the fact that class attendance is highly correlated with the successful completion of a course.

3. Seating arrangements are important for creating an atmosphere that is conducive to students' active participation in class. Where appropriate and possible, put students in circles. Face to face interaction seems to generate more student interaction than when students sit in rows facing the back of someone's head. (Incidentally, social psychological research has shown that morale is highest in any group in which participants are engaged in discussion.) A variation of the full circle is to ask students on each side of the room to shift their desks so that they are facing the center of the room and each other. This

frees the instructor to walk from the front of the classroom occasionally so as to make the back of the room the focus of attention. Some research shows that students who choose to sit up front usually do better in the course. Instructors might occasionally engage the students who select the back and who ordinarily would not choose to participate by standing closer to them. When chalkboard work, overhead transparencies, or class size makes circles not desirable, try to get students to sit close to each other. This can work by asking students not to sit in the last row in the back or in the side rows.

4. If you notice that the class has arranged itself in a way that is gender or race segregated, you might try a random-type rearrangement without calling attention to the fact that the original arrangement was segregated. Social psychological research suggests that proximity and contact among diverse people of equal status promotes harmonious relationships.

5. Encourage students to form study pairs or study groups. Make suggestions for how they might get organized and how they could approach their study sessions. Ask to meet with them occasionally if they would like to.

**Establishing a welcoming environment by encouraging more student participation in class: tips for faculty**

1. Make eye contact with all the students in your class. Some instructors have a tendency to establish eye contact with only some of their students. Often, instructors look to the students who *usually* participate; they may establish eye contact with the students whom they perceive to be connecting to the material or to them, or they may simply look to those students who are in their visual field. One way to encourage many students to participate is to divide your classroom into quadrants in your mind. Then, you can say, "Would anyone like to contribute an idea from the right back corner today?" Many faculty have come to rely on the trusted few in the class who tend to answer all the questions and contribute all the comments. These students probably don't need to participate as much as the quiet students in order to stay engaged and do well. What may happen is that the students who take longer to formulate their ideas take a back seat to the ones whose hands shoot up.

2. Try not always to call on those students whose hands are the first up. Increase the time you are willing to wait for another student to respond. Sometimes, this involves patience and endurance; many of us become uncomfortable with the silence. Students often become uncomfortable with the silence as well. Eventually, someone will take the risk and speak. According to Sandler and Hoffman (1992), the average "wait time" after asking a question is one second. They recommend waiting 5 to 10 seconds by counting to yourself, "One thousand, two thousand, three thousand..." to help you to endure the silence. Sandler and Hoffman suggest that women often wait longer than men to raise their hands because they are thinking about their response. Pay attention to

cues that indicate that a student may want to speak but needs encouragement, as for example, eye contact, leaning forward, etc. Engage them by saying something like, "Can you start us off?" or "Would you like to add something here?"

3. Move around the classroom so that you are in physical proximity to all students in the class. Talk across the room to address the whole group rather than the small contingency of students around you in the front.

4. It often helps students to write their ideas before they speak. Every once in a while, before you ask students to answer a question aloud, request that they take a moment to write their answer. This technique gets them to think more clearly and formulate their ideas more precisely, and it gives them more confidence to speak.

5. Throughout your class, occasionally take a poll on a particular issue. ("How many people believe?" "How many people remember?" "How many people have ever been to...?") These kinds of questions can create a sense of community and participation.

6. Make sure you are calling on women as often as you are calling on men. Pay attention to *all* students to guard against excluding anyone from the discussion.

7. Pay attention to your language in class to avoid the use of sexist terms such as "mankind," and the use of the generic "he." Use examples that include women as well as men. Do not address the class as if there were no women present.

8. According to many studies, women are interrupted by men far more frequently than vice versa, and women may be more vulnerable when they are interrupted than men in their ability to bounce back. Avoid interrupting women students or allowing their peers to interrupt them.

9. "Coach" women and other students whom you sense are reticent to speak with phrases such as, "Tell me more," or "Why do you think that is so?"

10. Listen carefully to students' questions and comments in class. Give substantive feedback rather than just a verbal or nonverbal acknowledgment. Sometimes, when students speak in class, what they say is inaccurate or ignorant. When you respond, the key is to respect the person even if you do not appreciate or respect their comment. Your tone of voice and demeanor are important in showing your respect for the student. You may be able to take misinformation and re-frame it so you are correcting the information for the class without diminishing the student's self worth. You might add information that corrects what the student says without dismissing the student's ideas. Students need to feel that their ideas and contributions are worthy of consideration and that the class is a safe environment to share what they have to say.

11. In order to increase the likelihood that students are actively processing information presented in class, use any of the following strategies to promote active listening: have students complete a sentence starter, have students find an error you intentionally put on the chalkboard or overhead transparency, ask students to develop an example of a concept just presented, have students answer a question that relates to material you have just covered, ask students to search their text or notes for evidence that supports or negates a statement presented (Prescott, 1994).

12. Be patient with students' questions and comments. If students experience your impatience, if they believe you see their question as an unwanted interruption, they will probably feel that you don't care about them or their ideas. Deferring students' questions to the end of your lecture will probably not work well. Students may forget their question, no longer care about the answer, and perceive you to be more content-oriented than student-oriented.

13. Praise students for their questions and comments. Vary the way that you reinforce students. One time, "Good question" might be appropriate. Another time, you might say, "Yes, that's right on target," or "Good point... I hadn't thought of that." Adding students' names to these comments can be even more reinforcing.

14. Throughout the semester and especially in the first few classes, show the students the relevance of the material you teach to their lives to help them stay motivated. Show your enthusiasm for your discipline. The instructor's enthusiasm is contagious. If you have lost some love of your discipline over the years, find ways to renew your interest. Go to conferences and workshops in your discipline and/or conferences dealing with teaching. Revise your courses so that they become new for you. Take on different preparations. Join the master faculty group on campus. Do something for yourself and for the vitality of your classes.

15. In your first classes of the semester, create a supportive atmosphere that promotes student success. Encourage students to work hard to achieve, to come to all their classes, to be on time for class, and to stay current with their studies. Don't deliver a gloom and doom lecture about how hard your course is and how many students fail. Share with them your high expectations but tell them about how other students have been successful. (Some faculty share with new students written comments from students from the previous semester; this seems to be effective since students often pay more attention to their cohorts than to their instructors.) Tell them about the college's available tutoring services and the Writing Center, and give them tips on how to do well in your course.

16. Students will more readily participate if they are interested and motivated to know more about the topic. Prescott (1994) suggests that faculty can motivate

students by capturing their attention and interest before introducing a new concept or skill. Motivational strategies include asking students to share personal experiences related to the topic, asking them to explain a perplexing scenario, asking them to guess the answers to questions that will be answered at the end of the topic presented, or asking their responses to some stimulus shown prior to your presentation.

17. Prescott (1994, p.5) suggests "giving students an opportunity to reflect on or practice newly presented information, concepts, or skills." She says that many learners need to practice or talk about newly acquired learning. Prescott suggests the following strategies designed to get students to incorporate what they have newly learned: Ask students to create (in writing or verbally) pro/con arguments, ask them to summarize, ask them to produce a dialogue reflecting their understanding, ask students to analyze data, ask them to write a critique, have them write an explanatory essay, and ask them to solve particular problems related to the material covered.

## PEDAGOGY AND CLASSROOM ATMOSPHERE

> *The essence of the productive classroom is the active engagement of student and teacher as well as student and student in the learning process. It is based on a commitment to open discussion, participation of all students, equal respect for all students, and recognition of and response to students as individuals rather than as representatives of a gender, minority, ethnic, age, or other group.*
> *(Sandler & Hoffman, 1992, pp. 14-15)*

### Feminist Pedagogy

Although some people may object to the term "feminist" to describe a teaching methodology that they see as simply non-authoritarian, the label actually describes an approach to teaching that stretches far beyond an attempt at an egalitarian classroom. First, it needs to be recognized that feminism is a movement that goes beyond the liberation of women. As Hyde (1991) and others have suggested, feminism is a belief system that promotes social, political, and social changes that would be necessary to achieve equality for *all* men and women. Feminism thus challenges the hierarchical structures which exclude not only women, but also people of color, and other groups that have been labeled "outsider" groups in the classroom climate literature.

Wood's (1989) discussion of feminist pedagogy provides a rationale for referring to this teaching/learning model as feminist. Wood (1989) says that feminism is inclusive so that topics representative of both sexes' experience and concerns are addressed. Feminism values diversity so that multiple ways of knowing are accepted and valued. Teaching becomes interactive because feminism places value on interpersonal relationships. Since feminism values personal experience, the thoughtful consideration of how ideas and knowledge relate to personal experience is encouraged. Feminism encourages empowerment rather than power so students have more control over their own learning. Feminism seeks to create change so that students can perceive themselves as agents of change.

Cooper (1993, p.133) says:

> *...Such a feminist approach to pedagogy means that the instructor places an emphasis on such things as individual learning styles, variety in teaching strategies, student-student interactions, creating a collaborative learning environment, requesting and reacting to student feedback on course content and pedagogy.*

Although I will refer to this pedagogy as feminist since that is the term used in the literature, perhaps a less charged and more appropriate label would be "humanistic" pedagogy.

In their discussion of feminist pedagogy, Sandler, Silverberg, and Hall (1996) suggest that it is more accurate to speak of feminist pedagogies since there is no one monolithic

theory. They discuss many of the themes that are common in feminist pedagogy such as the belief that no knowledge is objective, neutral, or value-free. Feminist pedagogy examines the perspectives of theorists, the origins of theories, and the influence of history and context on the development of knowledge and theory. Feminist pedagogy assumes that students learn best when they understand the relevance of the information to their own lives. This approach makes the sharing of student experience a legitimate line of inquiry in the search for knowledge.

Feminist pedagogy examines the role of gender, race, ethnicity, and class bias on the development of knowledge and is committed to helping students work through their own biases. One of the essential objectives of feminist pedagogy is to empower students, that is, to help them to become actively engaged with the material and to participate in class.

Berry (1991) explains that feminist pedagogy promotes a classroom atmosphere that is not hierarchical. The aim of the feminist classroom is to discover and share knowledge rather than merely transmit information from instructor to student.

Most college classes are set up in some hierarchical form. Although many teachers may attempt an informal class structure, the fundamental mechanics of the class are still hierarchical in that teachers determine the topics, sequence of content, format and logistics, and methods of evaluation for the course. Additionally, Treichler & Kramarae (1983) found that teachers typically talk three times as much as students in their classes. To a large degree, by their behavior, verbal and nonverbal, conscious and nonconscious, teachers also determine which students will participate and to what extent. In the typically arranged classroom, teachers stand in the front of the room, and the students who speak address their questions and comments to the teacher rather than to each other. (In the last section of this book on language, research will be presented showing that the practices, standards, and customs of discussion in the college classroom are far more hospitable to men's speech styles than to those of women.)

The fundamental theoretical issue addressed by feminist pedagogy is the issue of power in the classroom. Shirley Parry (1990) describes three major power relationships that are relevant in the classroom. The first is the relationship between the student and the course material/content. The second power relationship is that between student and teacher, and the third is the student-student relationship.

In terms of the first power relationship, that is, between student and course material, the traditional class is set up such that teachers convey information as if that information is objective. The content then takes on the power of "Truth" with a capital T. Within this framework, students are passive recipients of information - their task is to learn what is presented. Many faculty attempt to engage students more in active learning and thus use strategies, like class discussion, to get students to learn. Feminist pedagogy goes beyond this to challenge the very power relationship itself. In other words, feminist pedagogy challenges the notion of objectivity and "Truth," and suggests that <u>what</u> we

teach, the content, is only one version of reality. This representation of reality probably reflects the thinking and perspectives of particular groups of people who are usually male and, in most cases, white and privileged. This version of reality also probably reflects the thinking of a particular time, a moment in history, within a cultural context.

As teachers come to understand their own discipline within this feminist perspective, their attitudes change about the essence of what they teach and about the relationship between students and content. This means an openness to different perspectives and different ways of viewing the same material. Thus, feminist teachers would have greater interest in what students have to say in class because their questions and comments would be viewed as participation on a common journey of discovery. Feminist teachers would use techniques in their teaching which would encourage multiple points of view on issues. They would also develop strategies to engage the marginally involved students more fully in discussion to enable them to find and value their own ideas.

The second power relationship of interest to feminist pedagogy is the relationship between faculty member and students. Closely related to the reconceptualization of the content that is being taught is the reconceptualization of the role of the faculty member. The teacher becomes a facilitator and resource for student learning and mastery rather than the powerful expert and authority. The instructor still teaches but teaching is different -- it is less top down; teaching is no longer merely the imparting of information.

The last power relationship addressed by feminist pedagogy is the relationship between student and student. The typical classroom usually emphasizes the individual and encourages competition among students. The feminist classroom emphasizes the class as community (the collective), and promotes cooperation among students. Emphasis on cooperation can result in group work and collaborative learning exercises that are extremely productive for long-term learning. When students realize that the instructor doesn't have a lock on "truth," they begin to experience themselves as the potential source of knowledge. This empowers them, creating a sense of personal authority and responsibility. Collaborative exercises that emphasize the giving and receiving of help can create a sense of connectedness and community among class members and enhance the learning experience.

In Parry's articles (1990, 1992) dealing with feminist pedagogy, she describes a curriculum transformation project developed by faculty members from Maryland Community College and Towson State University and funded by FIPSE (Fund for the Improvement of Post Secondary Education). The strategies presented in the following pages reflect an up-date (with a different focus) of material found in *Teaching Tips* (McGlynn, 1992). Added to previous sources used, that is, Parry's summaries of the FIPSE project, the Humanities faculty brainstorming session during the Fall, 1991 semester, the faculty and student modified focus groups conducted on Mercer's campus from 1989 to 1992, will be the suggestions from MCCC students who participated in the spring, 1996 "climate" survey.

**Pedagogical strategies that address the student to content power relationship**

Before we, as faculty, are able to empower students to relate to the content of our discipline, it is necessary for us to realize that the body of knowledge we teach is not objectified truth. It has been said that a "fact" is always an interpretation. What one sees as reality is a perspective, a point of view, a version of reality. When we truly understand that what we teach, the "content" of our courses, reflects one version of reality, and that one version is probably the perspective of white, privileged men, we can begin a new journey, *with our students*, of discovery. As our own attitudes toward our subject area change, so does our view of our students' relationship to course material change. This does not mean that we have a laissez faire attitude toward knowledge in our field; nor does it mean that our classes become a free for all for sloppy thinking and useless conversation. It does mean that we have a new respect for the ideas voiced by our students. This new respect comes from the realization that there may be different realities, or at least different perspectives, on our course content *and they may be valuable contributions* to our collective understanding.

1. Get students involved in some way in the selection of course work. In the traditional class, the content is presented via course syllabus, term projects and papers, tests, etc. and the student is the passive recipient of the material. The power relationship between student and content may be altered in numerous ways. For example, have students involved in the selection of some of the readings for the course. Give students a choice of topics for papers and projects.

2. Ask students to develop essay questions for exams. They may then work in groups to select essays for submittal. Questions submitted by students might become a part of an exam or might be used for students to earn bonus points on a particular exam.

3. Journal Writing can be a tool that may engage students who are usually quiet in class and who may not feel engaged with the material. Having students write their personal reactions to the material they read, for instance, may enable some silent students to find their voice first in writing. In class, the journal entries might be used as the basis for a small group exercise. Those students who are usually hesitant to speak may feel more courageous since they have done some thinking and writing at home. In the FIPSE Project, faculty members who used journal writing in their courses wanted to encourage students "to interact with the material, to develop new ideas, to stimulate independent thinking, to elicit subjective responses, and to help students thoughtfully articulate their own points of view." (Parry, 1990, p.33)

4. The Minute Paper, described by Parry (1990), can be given in the last five minutes of class to assess the student's comprehension of the content of that day's class. The student responds in writing to two questions: What is the most important thing you learned today? What do you still have questions about? In

the FIPSE Project, faculty used minute papers at selected times during the semester, as for example, at the end of a course unit or before an examination, to assess what information needed more attention or what was troubling students. These ungraded minute papers were collected and shared with the class. The exercise seemed to help students to clarify for themselves what was significant to them and what was still unclear to them.

5. In review sessions prior to exams, Prescott (1994) suggests the following strategies: have students become topic experts and quiz each other, ask students to design a short review for the class, or ask students to write summaries that would be useful to study for the exam.

6. In order to ensure that students have learned from their mistakes on a project or exam, Prescott (1994) suggests the following strategies: have teammates help each member of the team to understand his/her errors and offer more effective alternative responses. She cautions faculty to set very clear directives about how students should deal with their classmate's errors so that students demonstrate sensitivity and support for one another.

7. Have students generate examples (individually or in pairs) of a newly presented concept.

8. Ask students to draw a flow chart showing how a procedure or process works.

**Pedagogical strategies that address the student to faculty power relationship**

What is the role of the professor in a classroom that is non-hierarchical? Does the professor give up authority in the classroom? The role of the teacher varies in different feminist classes and in different disciplines.

> *While feminist pedagogy includes finding more active roles for students, it does not necessarily call for a diminished role for the teacher, just a different one. Although some suggest the teacher's power should be abandoned, others claim than an empowering pedagogy does not dissolve the authority or power of the instructor.* (Sandler, Silverberg, & Hall, 1996, p.41)

Culley (1985) suggests that feminist professors should seek authority *with* their students and not authority *over* their students. Cannon (1990) writes that professors should use their power to create a classroom atmosphere that does not replicate the usual power imbalances that exist in society at large, and that without faculty awareness and intervention, those societal imbalances of power are automatically created.

Some faculty members may have concerns about losing the respect of students if they appear to be a resource/facilitator type teacher rather than an expert/authority type teacher. Sharing power with students enables them to learn more. It doesn't diminish

students' respect for their teachers. In fact, empowering students to become more active participants in the learning process seems to enhance students' respect for their teachers.

All of the tips designed to help faculty build rapport and connect with students (pp. 9, 10 and 11) would be applicable here.

**Pedagogical strategies that address the student-to-student power relationship**

As mentioned earlier, feminism emphasizes the collective group within the class. In the interest of fostering a sense of class community, the focus is on the cooperative rather than on the competitive. When students realize that the teacher is encouraging a journey of discovery and does not have a lock on the "truth," not only do they see themselves as potential sources of knowledge, they see themselves and others as more inter-connected and more dependent on each other for a successful journey.

1. Another version of the minute paper can be used after the second exam. The professor asks students to respond to this question: What did you do that improved your score so I can share it with other students? A FIPSE project participant used students' responses with other students in individual conferences. Students' tips to other students could also be shared in class. Students seem to give greater weight to their peer's suggestions than to those coming from their professors. The use of the minute paper in this context can help to transform the competitive nature of the student to student relationship into one that is more cooperative.

2. An expanded version of the Writing Across the Curriculum technique known as the Think-Pair-Share exercise can be used to create greater student to student interaction. Parry (1992) describes how a participant in the FIPSE project, a professor in criminal justice, used the Think-Pair-Share approach to address all three power relationships in the classroom. The model can be applied to many different disciplines. The professor starts off the class by introducing a particular question that is debatable. Students are asked to think about the question and jot down their ideas in three columns: Pros, cons, and a third column consisting of questions the student has about the topic and information that he or she wants before deciding on a position. Students are given about ten minutes to think and write by themselves. The professor then asks students to share with the large group only the content of their third columns; the professor writes this on the chalkboard. The professor then requests that students pair up to discuss the issue for another few minutes. The final piece of the exercise is a large group discussion on these third column items. In other words, rather than focus the class discussion on the debate, that is, the pros and cons of the issue, the discussion centers on what information is crucial to have for an informed decision to be made. This may even lead to a library research component of the exercise. Parry (1992) points out that the initial writing component of this exercise gets students to think about both sides of an issue and to clarify their

own thinking. The focus on the third column (in thinking, writing, and in discussion) gets students to understand the importance of data gathering in critical thinking before drawing conclusions about an issue. The pairing with peers and the large group discussion not only fosters student mastery of material but also provides opportunities for cooperative learning. Thus, the atmosphere in the classroom is cooperative rather than competitive. This type of exercise can create a sense of community and belongingness within the class.

3. Peer critiquing can be used as a way to foster cooperative student relationships as well as a way to enhance student writing skills. When assigning a homework essay, divide the class into groups of three. Explain the meaning of peer critiquing and that your intent is to get students to help each other become clearer writers. Ask students to act alternately as reader/writers and critiquers in the following way. Have students read the papers they have written aloud twice while the critics only listen. During the second reading of the paper, critics make written comments in response to three questions:

   1. I liked ____ about your paper because ____
   2. I would like to hear more about _____
   3. I need clarification on _____

   The signed comments are then handed to each writer/reader. Depending on the critic's comments, the writer/reader may revise his or her essay at home. In the next class, the paper is submitted, including the original draft on the bottom, the signed comments in the middle, and the revised draft on top (all stapled together).

4. The use of Study-Buddy Groups can be a way to foster community in the class as well as a way to improve class discussions. Ask students to form four person study groups (students may self select or you might use a variety of strategies to group students together depending on your goals for the group). Request that they begin every class within their group working on some ongoing assignment. When I teach the psychology of relationships course, I ask students to make journal entries on the assigned readings prior to each class. I ask them to discuss their journal entries with their study team during the first five minutes of the class. Not only are class discussions richer and more lively, classmates seem to bond with one another at a deeper level. This probably is influenced by the nature of the course but the study team concept can be useful in fostering cooperative relationships in any course.

5. Have students work in pairs to develop scenarios of how a particular concept might be applied.

6. Ask students to develop a problem regarding a particular concept. Then have them exchange problems with another student, attempt a solution, and then discuss with each other.

7. Ask students to pair up to do summarizing and checking. One student summarizes what has been presented in class. The other student listens and adds, clarifies, or negotiates interpretations of what material was presented.

## COLLABORATIVE AND COOPERATIVE LEARNING

### Other teaching strategies that promote learning, student cooperative relationships, and classroom harmony

> *Instructors can choose whether to be "a sage on the stage" or "a guide on the side" (King, 1993) ... In doing so, they might remember that the challenge in college teaching is not simply covering the material but uncovering it.*
>
> *(Sandler, Silverberg, & Hall, 1996, p. 41)*

The typical college classroom employs the "talking head" model of teaching. Students are supposed to listen to what the professor says, take notes, memorize the information, and later reproduce it for an examination. This teaching/learning model is known as the transmittal model in that teachers are supposed to transmit knowledge to their students. In this model, students are passive recipients rather than active learners. King (1993) argues that this model is outdated and will be ineffective in teaching students critical thinking skills. An alternative suggested by King is the constructivist theory of learning. According to this view, knowledge does not come packaged in books, journals, CD roms, or teachers' minds, and is thus not able to be transmitted. Information can be transmitted but knowledge is a state of understanding and can exist only in the mind of the individual learner. In this view, knowledge must be *constructed* or *restructured* by individuals by trying to assimilate new information with what is already understood and known.

In the constructivist view of learning, students use what they already know and their prior experience to help them understand and incorporate new material. This view follows Piaget's theory of the active nature of the learning process. Learners must generate new relationships between and among the new material, and between the new material and what they already know. The constructivist model of teaching and learning places students at the center of the process and encourages them to think about ideas, discuss them, and make them meaningful for themselves. The instructor is still responsible for presenting course material; however, instructors present material in ways that encourage students to do something with the information, to interact with these new ideas, and to relate this new material to previously learned material. The move from the transmittal model to the constructivist model involves instructors learning how to encourage active learning in the classroom. It usually means a shift from straight lecture to a format that incorporates collaborative or cooperative learning strategies.

Some theorists use the terms "collaborative learning" and "cooperative learning" interchangeably while others make distinctions between the two. The literature does support the idea that they are not one and the same. Although they share many common elements, collaborative learning is much more than simply using groups in class (Nygard, 1991). Kenneth Bruffee (1984) says that in collaborative learning, the teacher defines the task, and then organizes the students to work it out collectively. In this collaborative learning model, which shares some theoretical underpinnings with

feminist pedagogies, students are no longer perceived as passive recipients of the teacher's knowledge. Knowledge is no longer viewed as objectified "truth." Weiner (1986) adds that knowledge depends upon social relations and intellectual negotiations. Collaborative learning thus requires that student groups work on tasks that have more than one answer or solution, and that require, or benefit from, multiple perspectives. Thus, the completion of the assigned task benefits from collective judgment.

Collaborative learning is also distinguished from cooperative learning exercises in that there is a requirement that students reach consensus as a group on an issue. This pushes students to work cooperatively rather than competitively. Listening to their classmates' divergent views gets students to realize that perspective and bias play a role in everyone's thinking. This gets them to challenge the ideas of the so-called experts. When consensus works effectively, students do some genuine intellectual negotiation in which they share and revise their thinking. Weiner suggests that the group's effort to reach consensus is the major factor that distinguishes collaborative learning from simply having students work in groups.

Another distinguishing feature of collaborative learning is that the instructor does not circulate among the groups. The collaborative learning model discourages teacher circulation among the groups in the belief that the teacher's presence can be intrusive. The presence of the teacher might heighten or inhibit the activity of the group. The teacher should serve as time keeper, occasionally asking groups how far along they are towards completion, to keep them focused on the goal. By keeping teacher involvement to a minimum, students tend to take more responsibility. During collaborative exercises, the role of the instructor changes to class manager, in charge of setting the task, seating arrangements, group composition development, overseer of small group dynamics, and synthesizer for the reconvening of the large group. If student home preparation was necessary for the group task, instructors may need to solve the problem of the unprepared student. Some instructors have students do the homework during the class and then join their group when they finish. Instructors will observe the workings and dynamics of the groups from afar, keeping a low profile. Instructors may intervene to make adjustments they think may be necessary.

After small groups have completed their tasks, the instructor reconvenes the large group, and in this context, serves as the synthesizer of the groups' work. Following each group's report to the entire class by the group recorder, during which there is no class or instructor discussion, instructors need to use their knowledge and expertise in their field to help students synthesize each group's work with that of the other groups. The aim is to have students see the similarities, differences, and contradictions among the various groups' perspectives. This model seems to promote students taking more responsibility for their own learning, becoming more open to divergent points of view, and developing a greater investment in each other's contributions. Many studies also show that students who learn by collaborative exercises have greater long-term retention of material.

Much of the research on group work has studied what Johnson, Johnson, & Smith (1991) call "cooperative learning." Cooperative learning shares so many common elements with collaborative learning that Sandler, Silverberg, and Hall (1996) use the phrase collaborative learning to refer to any learning that occurs when students work together. Johnson et. al (1991, iii) state that cooperative learning is "the instructional use of small groups so that students work together to maximize their own and each other's learning." They make a further distinction between simple small group exercises and what they call cooperative learning. According to these researchers, to be considered cooperative learning, group exercises need to be *structured* in such a way as to maximize learning and cooperation.

> *As does any pedagogical strategy, the collaborative model brings with it its own ideological assumptions. Just as a lecture format assumes that the teacher's role is to impart knowledge to "spongelike" students, collaborative approaches assume that students should be involved not just in receiving knowledge but in constructing it. A collaborative structure gives as much value to the process as to its product.* *(Sandler, Silverberg, & Hall, 1996, p. 44)*

The use of collaborative learning groups within a more traditional lecture/discussion type class may engage more students in the content of the course, may increase comprehension of the material, may increase participation in class, and may increase the likelihood that students will apply what they have learned. Johnson et. al (1991) say that all of this is more likely to happen because the rehearsal of information soon after it has been received or processed usually results in increased retention.

In truly cooperative learning exercises (and what many refer to as collaborative learning), the following criteria must be met by group members:

- Group members must have clear, positive interdependence
- Members must promote each other's learning and success
- Students must hold each other personally and individually accountable to do a fair share of the work
- Members need to use the interpersonal and small-group skills needed for cooperative efforts to be successful
- The team must process as a group how effectively members are working together

(Johnson, Johnson, & Smith, 1991, iv)

Johnson and his collaborators say that when groups are structured this way, the exercises can be used to teach specific content and problem-solving skills, while maximizing the probability that all students contribute and that no single student does all the work.

Cooper and Mueck (1990) add certain criteria they deem necessary for cooperative learning exercises to be successful. These researchers believe that teachers should select the students for each group rather than allowing students to self select. In their experience, allowing students to select their own team members produces excessive

socializing and off-task discussion within the groups. They suggest that teachers group students heterogeneously based on achievement, ability, and any other factors that may promote diversity of groups. They say that all teams must have some serious, task-oriented students to produce a high level of student involvement and on-task behavior.

Cooper and Mueck also suggest that team building should be among the first activities implemented to encourage group cohesiveness. This can be achieved in a variety of ways. The common element to all such activities is that students spend the beginning 10 to 20 minutes of their first cooperative learning session getting to know each other. Johnson et. al (1991) summarize a wide body of research on cooperative and collaborative learning strategies. They found that compared to individual or competitive learning strategies, group strategies often result in higher achievement, better student relationships, greater use of higher-level cognitive skills, increased self-esteem, more positive attitudes toward the subject matter, greater motivation and persistence, greater willingness to take on difficult tasks, and usually decreased absenteeism. (Decreased absenteeism is qualified because students who are unprepared to engage in collaborative exercises may actually skip classes.) In fact, the Johnson et. al (1991) analysis of hundreds of comparative studies shows that the use of cooperative learning strategies promotes higher student achievement than either individualistic approaches or ones that rely on competition.

Eubanks (1991) also found that increased rates of retention and persistence to graduation, particularly for minority students, have been correlated with collaborative and cooperative learning strategies. Sheridan, Byrne, & Quina (1989) found that some faculty report that after using collaborative strategies in class, their students seemed to show more enthusiasm for the course and were even more likely to visit them in their offices.

Sandler, Silverberg, and Hall (1996) cite studies that assess collaborative learning strategies from the perspective of students. The advantages of cooperative and collaborative learning strategies mentioned by students include: mastery of subject matter, quality of peer interaction, increased ability to understand divergent points of view, greater interest in and enjoyment of the class, and an increased motivation to attend classes.

Sandler et. al conclude that the de-emphasis on competition, the opportunity to be active learners, and the emphasis on listening skills and cooperation all contribute to make collaborative learning strategies a useful tool to increase women and minorities' participation in class. They further claim that faculty who use some collaborative learning exercises may reach more learners, not just women and minorities. The research shows that *all* students seem to benefit by the use of collaborative strategies and that females and minorities seem to perform particularly well.

One of the major concerns of Sandler and her co-authors, however, is that the traditional literature does not examine how gender and race affect individuals within

groups. Structured interdependent groups working on a common task may not automatically create a learning environment that is positive and fair to all students. Power dynamics that operate in society at large may govern the interactions of the collaborative groups if they are not supervised carefully. Sandler and her co-authors suggest that if students in a group project assume particular roles or assign roles to each other, such as recorder, synthesizer, and presenter, faculty members need to ensure that women are not always chosen as recorders and men as presenters. In other words, instructors are responsible to ensure that roles within groups do not play out gender and race based stereotypes. Otherwise, this pedagogical strategy would follow the same patterns as those found in more traditional classes, with females and minorities participating less. Krupnick (1993) says that faculty need to pay attention to gender, race, ethnicity, and class issues in group composition and dynamics, since some studies show that group work may reproduce traditional power relationships unless there is a deliberate and successful attempt to deal with gender and racial bias. Cooperative and collaborative group exercises have the potential to help build better relationships among students who are different from each other. There have been many studies showing that cooperation fosters more positive cross-ethnic relationships than competition.

Some other issues arise for instructors who integrate collaborative exercises within their classes. For example, Sandler et. al discuss the role of student responsibility and some students' resistance to the collaborative model. Many students may be used to a lecture format; they believe it is their role to write down what the teacher says and that any departure from this in terms of students' participation is a waste of time. Faculty members need to guide students to assume more responsibility for their learning. They may need to clarify their expectations about what participation means, how it is assessed, and how it is graded.

Related to this issue of student responsibility is the most common worry about collaborative work voiced by faculty members, that is the social loafing phenomenon or "free-rider problem." Students often share this concern with instructors. How do instructors and students ensure that all group members contribute to the final product ? How can the process guard against the possibility that the final product is the result of the work of one or two highly motivated students? Sandler et. al (1996) admit that there is no way to eliminate these possibilities in collaborative work but there are ways to limit the likelihood that the free-rider problem will occur. There are assessment strategies designed to lessen the likelihood of the free-rider concern, as for example, the assessment of individual performance within the group. Each group member may be required to participate in an oral presentation and/or submit a report of who did what and how that was determined. Instructors can administer a quiz, either written or oral, or select a student group member at random to take a quiz for the whole team. Typically, instructors who use both individual and group assignments devise a system to grade both the individual and group performances.

Grading is another concern of instructors who incorporate collaborative models within their classes, not only in terms of how to weigh individual performance but also because

of its role in the authority and power issues discussed previously. Faculty members still wield a certain amount of power and authority by virtue of the fact that they evaluate students and assign grades. Some instructors who are committed to feminist pedagogies are experimenting with alternative models of evaluation in which students design methods of evaluation for their own work, or use semester-long portfolios, peer assessment, etc.

For faculty interested in employing collaborative and cooperative learning tasks within their classes, Johnson et. al (1991) suggests the following five essential components:

1. Interdependence. The instructor defines the task. This may be the most important piece since the instructor has to create a task for which the final product makes sense only as a collaborative effort. Students need to believe that they are engaged in a collective effort and that their success is interdependent. Instructors can ensure interdependence by assigning roles such as summarizer, recorder, reporter, synthesizer, researcher, accuracy coach who makes sure everyone understands, and observers who oversee how well the group process is working.

2. Interaction. Students are encouraged to assist each other. This contrasts with other learning models in which student sharing of information is considered a form of cheating.

3. Individual accountability. Instructors usually create small groups; usually four or five students work well. Instructors may give individual assessments to each student, ask each student questions, observe the groups in action, assign roles, and ask students to teach what they have learned to someone else. Students are instructed that the group is responsible for educating all its members and that any group member may be asked to report the results of the group's efforts.

4. Development of social skills. These collaborative exercises can teach students valuable communications skills and instructors can point out the importance of such skills throughout life.

5. Mechanisms for the group to evaluate their progress and working relationships.

If these criteria are met and the group task is carefully designed such that the end product requires or benefits from a collective effort, instructors should be able to start using cooperative and collaborative learning strategies. Cooper and Mueck (1990) suggest that it is possible to use cooperative learning strategies within more traditionally structured classes without a big class time commitment. They suggest some simple exercises for instructors to start experimenting. For example, the instructor can pause after fifteen or twenty minutes of lecture and ask pairs of students to reflect on the lecture material in particular ways (e.g., have students create examples or develop questions related to the lecture). Another suggestion is to have groups of students form

teams to review for exams. Students could be given examination review materials; their task would be to reach consensus concerning the answers.

There are many possible group strategies described in several of the references on this topic found in the reference section of this book. In *Teaching Tips,* (McGlynn,1992, pp.22-23), one of the many collaborative strategies, known as the modified focus group approach, is described. The modified focus group technique can work in a variety of contexts.

For successful modified focus groups to operate, the instructor must set up a question or problem to be solved that requires a collaborative effort and benefits from multiple perspectives. All students are asked to think about the issue presented and to do some writing. Sometimes, students can be asked to generate a certain number of ideas and to list these. Groups of four or five are set up (randomly, or with some objective in mind, as for example, the setting up of heterogeneous groups so as to foster interaction among diverse students).

The instructor asks the group to select the group recorder, making sure that women are not automatically chosen, and a group reporter who will report the group's findings when the large class reconvenes. This can be the same person, recorder/reporter or the tasks may be divided. Other roles may be selected or assigned such as the role of observer of group process, synthesizer, etc. In order to ensure that everyone's ideas are heard and no one person dominates the group, a round-robin process begins in which each group member shares one item from his or her list. When all members have shared their first idea, each group member then shares his or her second idea. The process continues until all ideas have been heard. The recorder may write everyone's ideas on newsprint, a flip chart, or a sheet of paper so that everyone can review all that had been offered. During the round-robin process, there is no discussion of ideas unless clarification is needed.

Following the round-robin process, two approaches can lead to a final product. The first approach involves having students rank order all of the ideas from the master list on a continuum of 1 to 5, with 1 being of least importance to them and 5 being of greatest importance. The group leader tabulates scores for each of the ranked items for the group's final rankings which are then reported to the large group. A second approach involves getting students to reach consensus by discussion of ideas from the master list. Students can be instructed to reach consensus with the instructor explaining that consensus means group agreement and not majority rule. Instructors may allow for minority reports if groups reach impasses in their attempts at consensus.

A last step in the modified focus group collaborative technique involves the reconvening of the large class. Each reporter outlines the ideas of his or her group for the class without discussion at this point unless clarification is requested. Other group members may add or clarify their own reporter's presentation. After all groups have reported and students have observed the multiple perspectives on an issue, the instructor attempts to synthesize what has occurred by encouraging students to analyze and share their

perceptions and interpretations of the similarities, differences, and contradictions among the groups. This is an opportunity for a larger perspective to be created, sometimes even larger than the sum of the various groups' insights. This is only one of many such strategies but has been included here since it has wide applicability.

Another cooperative learning strategy that has wide applicability is known as the "jigsaw" technique. King (1993) says that jigsaw exercises are designed such that each student in a group gets only part of the learning materials and must learn that one part in order to teach it to the others in the group. Each student's part is like one piece of a jigsaw puzzle, and because students must combine their pieces to solve the problem, each team member's contribution is highly valued.

To use this technique, the instructor needs to divide the material to be learned into several parts (no more than five or six). Students are assigned to "home teams" with as many members as there are parts of the learning materials. Each home team member receives one part of the material to be learned. Students reassemble into "expert groups" where they gather with the other students who received the same material as they did. Within these groups, students read and discuss their part so that they learn it thoroughly. They then return to their home teams and teach the part they have learned to their teammates. In this way, "jigsaw" emphasizes interdependence. Each student is then tested independently and this emphasizes individual accountability.

King (1993) also describes a cooperative learning technique known as "constructive controversy." In this technique, students work in groups of four, and pairs of students within these groups are assigned to opposing sides of a controversial issue. Each pair researches its position and then the pairs discuss the issue as a team. This technique is designed to help students become more informed and is not meant to encourage debate. In fact, after some discussion has taken place, pairs of students switch sides of the issue and then argue the opposing side. Each student is tested on the material individually to assess comprehension of the material.

These are just a few examples of cooperative/collaborative learning strategies.

## LANGUAGE AND CLASSROOM ATMOSPHERE

> *The primary focus of my linguistic research always has been the language of everyday conversation. One facet of this is conversational style: how different regional, ethnic, and class backgrounds, as well as age and gender, result in different ways of using language to communicate...As I gained more insight into typically male and female ways of using language, I began to suspect some of the causes of the troubling facts that women who go to single sex schools do better in later life, and that when young women sit next to young men in classrooms, the males talk more. This is not to say that all men talk in class, nor that no women do. It is simply that a greater percentage of discussion time is taken by men's voices.* (Tannen, 1992, p. 14)

Sandler, Silverberg, and Hall (1996) discuss the communication styles differences of men and women. They suggest that it is the power difference between men and women that gives value (or devalues) whatever differences exist. They say that a group's power or lack of power, which can be based on gender, race, age, class, or sexual orientation affects the classroom environment by replicating our society's power relationships.

One example of how power may be reflected in the classroom is to observe which students do most of the talking in class. Deborah Tannen, and a host of other researchers, have studied experimental findings that contradict the popular myth that women talk more than men. What has been found, in fact, is that males speak more often than females, and more of the time, in mixed gender interactions. The myth is so strong, however, that the actual findings often contradict peoples' perceptions of reality. For example, after observers actually counted and recorded the numbers of times males and females had spoken in class, faculty members were often surprised to learn that males dominated the conversation. They thought that males and females were participating equally. Typically, in mixed gender classrooms, from grade school through graduate school, females participate less even though teachers *believe* that participation has been equal. Controlled studies have shown that women usually speak about one-third of the time that men do. And, in classes where there is roughly equal participation, females are often perceived as dominating the class. Here is an excerpt from Bert Newborne, a professor at New York Law School:

> *I actually kept a journal on how long women and men spoke... and at the end of the year, women had spoken about 40-45 percent of the time... When I asked the men, they said the class was dominated by women so it was completely unfair. They thought women were speaking 80 percent of the time.*
> (Newborne, Washington Post, January 29, 1995)

Where the lesser participation of women in class occurs, it may be partly the result of the fact that males typically speak more than women. Other related findings that may be influential: men tend to interrupt women far more than women interrupt men, and men are far more likely to control the topic of conversation. Tannen (1992) suggests

some additional dynamics that make the classroom less hospitable for women to participate. She cites studies from sociology, anthropology, and psychology that have demonstrated gender differences in early play behavior. Young boys tend to play in larger groups than young girls do, and boys' groups tend to be hierarchical.

Tannen says that these early play behaviors have dramatic implications for classroom interaction:

> *...boys are expected to use language to seize center stage: by exhibiting their skill, displaying their knowledge, and challenging and resisting challenges...speaking in a classroom is more congenial to boys' language experience than to girls' , since it entails putting oneself forward in front of a large group of people, many of whom are strangers and at least one of whom is sure to judge speakers' knowledge and intelligence by their verbal display.*
>
> *(Tannen, 1992, p. 14)*

Another aspect of many classrooms that Tannen believes makes them more hospitable to men's conversational styles than to women's styles is the use of debate-like formats. This often involves public display followed by argument and challenge. Additionally, Tannen argues, men may feel more comfortable to speak in class than women do because the class is a "public" setting. Women typically (of course, not all women) are more comfortable speaking in private, in small groups, where they know people well.

Add to these reasons the fact that men and women often have different attitudes toward speaking in class. Men may typically believe that it is their job to think of contributions and to get the floor frequently to express their ideas. Women, on the other hand, may believe that if they have already spoken in a given class, they should refrain from further participation so as not to dominate the conversation. We might call these differences "the ethics of participation." Tannen says these attitudes are unspoken. Maybe they are not even known or understood. Frequently, the differences are interpreted very differently as well. Those who speak freely and frequently may believe that those who remain silent have nothing to contribute; those students who are holding back from contributing may perceive the talkers as hogging the floor.

Another aspect of the ethics of participation in class involves the issue of students raising their hands to speak or just jumping into the conversation. Tannen says that those students who believe they need to be acknowledged before it is permissible for them to speak do not have an equal opportunity to participate. Students from certain cultural backgrounds, as well as many women, may be more likely to believe they need to raise their hands and be acknowledged before they speak in class. She says that telling those reticent students to feel free to jump in any time will not make them feel free. Students' beliefs and attitudes about their role in a classroom are probably learned over years of conditioning. This conditioning may be gender related, culture related, class related, or age related, and it may be firmly ingrained; changes are possible with motivation and effort on the student's part and with understanding, sensitivity, and training on the instructor's part.

> *The goal of complete equal opportunity in class may not be attainable, but realizing that one monolithic classroom-participation structure is not equal opportunity is itself a powerful motivation to find more diverse methods to serve diverse students - and every classroom is diverse. (Tannen, 1992, p. 17)*

Tannen is convinced that small group interaction is a classroom strategy that has the potential to level the playing field. She believes that part of small group interaction should include students becoming observers of their own interaction patterns.

> *Talking about ways of talking in class makes students aware that their ways of talking affect other students, that the motivations they impute to others may not truly reflect others' motives, and that the behaviors they assume to be self-evidently right are not universal norms. (Tannen, 1992, p.17)*

**What faculty can do to make the classroom more hospitable**

- Avoid the use of the generic "he" in your presentations whenever possible.
- In addressing the class, use terminology that includes both males and females.

Philosophers have believed, and now cognitive psychologists have demonstrated, that language shapes our thoughts. Study after study has shown that when men, women and even children are asked to respond in some way to generic terms, such as "he," "him," "his," "man," and "mankind," they are more apt to visualize males. They do not conjure images of both males and females, and this is true for the written word and the spoken word. This finding has profound implications for how girls and boys in their early education years, and men and women in college, respond to what they read and how they experience the classroom setting. Sandler, Silverberg, and Hall (1996) say that the use of male terms to include both genders can exclude women and can reinforce stereotypes that students hold. If girls and women do not "see" themselves in what they read or in the class discussions, they may feel that the content is not relevant to them. Thus, language usage may affect both their learning and their class participation.

- When referring to students, use the terms "men" and "women" rather than kids, boys, girls, or gals.
- Avoid the use of language or examples in class that assume that everyone is heterosexual.

Pamela Cooper (1993) gives advice about language and communications patterns in the classroom which she learned from the original Hall and Sandler chilly climate research in 1982. Remember that what these researchers found, and what they suggested as solutions, apply not only to female students but to all those students who may be considered members of "outsider" groups.

These researchers suggest that faculty should:

- Pay particular attention to classroom interaction patterns early in the semester since these patterns are likely to continue throughout the term. During this early period, make a special effort to draw women, and other students who seem reticent to speak, into the discussions.

- Intervene in communication patterns among students that may shut out females. For example, if male students pick up on each other's points, but ignore an appropriate comment offered by a female, slow the discussion and pick up on the comment that has been overlooked. (Of course, if you notice *any* student's appropriate comment being overlooked, you should respond similarly.)

- Respond to female and male students in similar ways when they make comparable contributions to class discussion by:

    a. crediting comments to their author
    b. "coaching " for additional information

- Note patterns of interruption to determine if female students are interrupted more often than male students. Make a special effort to ensure that all students have the opportunity to finish their comments.

- Ask male and female students qualitatively similar questions - that is, ask students of both sexes critical thinking questions as well as factual questions.

- Give female and male students an equal amount of time to respond after asking a question.

- Give male and female students the same opportunity to ask for and receive detailed instructions about the requirements for an assignment.

- When discussing occupations or professions in class, use language that does not reinforce stereotyped or limited views of male and female role and career choices.

- Avoid placing professional women in a "special category," as for example, "woman doctor."

- Make eye contact with female students as well as male students after asking a question to invite a response.

- Watch for and respond to nonverbal cues that indicate female students' readiness to participate in class, such as leaning forward or making eye contact.

- Use the same tone of voice in speaking with female as with male students. For example, avoid using a patronizing or impatient tone when speaking with females, while using a tone of interest and attention when talking with males.

- Eliminate sexist materials from your curriculum.

Research clearly shows that language usage and communications patterns in the classroom greatly affect classroom atmosphere. Teachers at all levels of the educational system can become astute observers of the process, take a proactive role to promote inclusiveness, and intervene where necessary to create a more hospitable atmosphere of learning for *all* students.

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